

## APPENDIX 8. ACRONYMS

1DVAR	1-dimension variational	CIMEL	Sun Photometer (French word)
2D	two-dimensional	CLS	Cloud Lidar System
3D	three-dimensional	CNES	Center Nationale d'Etude Spatiales
4DDA	four-dimensional data assimilation	Co-I	Co-Investigator
ACCENT	Atmospheric Chemistry of Combustion Emissions Near the Tropopause	CONTOUR	Comet Nucleus Tour
AEAP	Atmospheric Effects of Aviation Project	COVIR	Compact Vis IR
AETD	Applied Engineering and Technology Directorate	CrIS	Crosstrack Infrared Sounder
AIRS	Atmospheric Infrared Sounder	CRM	Cloud Resolving Model
AMNH	American Museum of Natural History	CSTEA	Center for the Study of Terrestrial and Extraterrestrial Atmospheres
AMSR	Advanced Microwave Scanning Radiometer	DAAC	Distributed Active Archive Center
AMSU	Advanced Microwave Sounding Unit	DAO	Data Assimilation Office
AOD	aerosol optical depth	DAS	Data Assimilation System
ARL	Airborne Raman Lidar	DDF	Director's Discretionary Fund
ARM	Atmospheric Radiation Measurement	DIAL	Differential Absorption Lidar
ARREX	Aerosol Recirculation and Rainfall Experiment	DISS	Distributed Image Spreadsheet
ATMS	Advanced Technology Microwave Sounder	DMSF	Defense Meteorological Satellite Program
AVHRR	Advanced Very High Resolution Radiometer	ECSSO	Executive Committee for Science Outreach
AVIRIS	Airborne Visible/Infrared Imaging Spectrometer	EDOP	ER-2 Doppler Radar
BUV	Backscatter Ultraviolet	EDR	Environmental Data Record
C	Celsius	EI	El Niño Index
CAN	Cooperative Agreement Notice	ENSO	El Niño Southern Oscillation
CCAST	Cooperative Center for Atmospheric Science and Technology	ENVISAT	Environmental Satellite
CCD	Convective Cloud Differential	EOS	Earth Observing System
CCM4	Community Climate Model version 4	EPIC	Earth Polychromatic Imaging Camera
CEAS	Center for Earth-Atmosphere Studies	ERBE	Earth Radiation Budget Experiment
CFCs	chlorofluorocarbons	ESA	European Space Agency
CHARC	CSTEA HBCU Academic and Research Consortium	ESE	Earth Science Enterprise
CHyMERA	Compact Hyperspectral Mapper for Environmental Remote Sensing Applications	ESIP	Earth Science Information Partners
CICA	Competition In Contracting Act	ESPI	ENSO Precipitation Index
CIFAR	Cooperative Institute for Atmospheric Research	ESSIC	Earth System Science Interdisciplinary Center
		ESSP	Earth Systems Science Pathfinder
		Etheater	Electronic Theater
		EU	Engineering Unit
		EUV	Extreme Ultraviolet
		FFPA	filter/focal plane array

FOR	field of regard	INMS	Ion and Neutral Mass Spectrometer
ft	feet	IOP	Intensive Operations Period
GCE	Goddard Cumulus Ensemble model	IORD	Integrated Operational Requirements Document
GCM	General Circulation Model	IPO	Integrated Program Office
GCMS	Gas Chromatograph Mass Spectrometer	IR	Infrared
GCRP	Global Change Research Program	ISAS	Institute of Space and Aeronautical Science
GEOS	Goddard Earth Observing System	ISCCP	International Satellite Cloud Climatology Project
GEWEX	Global Energy and Water Cycle Experiment	ISIR	IR Spectrometer Imaging Radiometer
GLOBE	Global Learning and Observations to Benefit the Environment	ITCZ	Intertropical Convergence Zone
GLOW	Goddard Lidar Observatory for Winds	JARG	Joint Agency Requirements Group
GMI	Global Modeling Initiative	JASON	name of a mythical character the project is named for
GMS	Geostationary Meteorological Satellite	JCET	Joint Center for Earth Systems Technology
GOES	Geostationary Operational Environmental Satellite	JCG	Joint Center for Geoscience
GoHFAS	Goddard Howard University Fellowship in Atmospheric Sciences	JCOSS	Joint Center for Observation System Science
GPCP	Global Precipitation Climatology Project	JPL	Jet Propulsion Laboratory
GPMS	Galileo Probe Neutral Mass Spectrometer	K	Kelvin
GPS	Global Positioning Satellite	KCO	Kaashidhoo Island Observatory
GSFC	Goddard Space Flight Center	km	kilometers
GUV	Ground-based Ultraviolet Radiometer	KWAJEX	Kwajalein Experiment
GV	Ground Validation	LARS	Lidar Atmospheric Raman Spectrometer
GVP	Ground Validation Program	LAS	Leonardo Airborne Simulator
h	hours	LASAL	Large Aperture Scanning Airborne Lidar
HARLIE	Holographic Airborne Rotating Lidar Instrument Experiment	LI	La Niña Index
HBCUs	Historically Black Colleges and Universities	LSM	Land Surface Model
HDTV	High Definition TV	m	meters
HIRS	High Resolution Infrared Sounder	mb	millibar
HOTS	Holographic Optical Telescope and Scanner	MBA	microbolometer array
HSB	Humidity Sounder Brazil	MEIDEX	Mediterranean Israeli Dust Experiment
HSCT	High-Speed Civil Transport	mid-IR	mid-Infrared
HUPAS	Howard University Program in Atmospheric Sciences	MIT	Massachusetts Institute of Technology
IAP	Independent Activity Period course	mm	micrometer
IFOV	instantaneous field of view	MM5	Mesoscale Model 5
IGS	Internal Government Studies	MODIS	Moderate Resolution Imaging Spectroradiometer
IIP	Instrument Incubator Program	MPL	Micro Pulse Lidar
INDOEX	Indian Ocean Experiment	MRF	Medium-Range Forecast

MSU	Microwave Sounding Unit	PAUR	Photochemical Activity and Ultraviolet Radiation Modulation Factors
NAS	Numerical Aerospace Simulation	PI	Principal Investigator
NASA	National Aeronautics and Space Administration	PLACE	Parameterization for Land Atmosphere Cloud Exchange
NASDA	National Space Development Agency	POES	Polar Orbiting Environmental Satellite
NCAR	National Center for Atmospheric Research	ppbv	parts per billion volume
NCCS	NASA Center for Computational Sciences	PSAS	Physical-space Statistical Analysis System
NCEP	National Center for Environmental Prediction	QuikSCAT	scatterometer satellite
NDSC	Network for the Detection of Stratospheric Change	RCDF	Radiometric Calibration and Development Facility
NESDIS	National Environmental Satellite Data and Information Service	RSAS	Rayleigh Scattering Altitude Sensor
NEWMAST	“NASA Educational Workshop for Secondary Math, Science, and Technology Teachers”	s/n	signal to noise
NGI	Next Generation Internet	SAFARI	Southern Africa Fire-Atmosphere Research Initiative
NGIMS	Neutral Gas and Ion Mass Spectrometer	SAGE	Stratospheric Aerosol and Gas Experiment
NIEM	Russian Scientific Research Institute of Electromechanics	SASS	Subsonic Assessment
NIST	National Institutes of Standards and Technology	SBIR	Small Business Innovative Research
nm	nanometer	SBUV/2	Solar Backscatter Ultraviolet/version 2
NMNH	National Museum of Natural History	SCAR-B	Smoke Cloud And Radiation -Brazil
NMS	Neutral Mass Spectrometer	SCHIAMACHY	Scanning Imaging Absorption Spectrometer for Atmospheric Cartography
NO	nitric oxide	SCO	stratospheric column ozone
NOAA	National Oceanic Atmospheric Administration	SCSMEX	South China Sea Monsoon Experiment
NPOESS	National Polar Orbiting Environmental Satellite System	SeaWiFS	Sea-viewing Wide Field-of-View Sensor
NPP	NPOESS Preparatory Project	SHARP	Summer High School Apprenticeship Research Program
NRC	National Research Council	SMiR	Scanning Microwave Radiometer
NSES	National Science Education Standards	SOLSE/LORE	Shuttle Ozone Limb Sounding Experiment/Limb Ozone Retrieval Experiment
NSIPP	NASA Seasonal-to-Interannual Prediction Project	SOLVE	SAGE Ozone Loss and Validation Experiment
NTSC	National Television Standards Committee	SONEX	Sass Ozone and Nitrogen oxides EXperiment
OAT	Operation Algorithm Team	SPARCLE	South Pole Atmospheric Radiation and Cloud Lidar Experiment
ODIN	a Swedish small satellite project for astronomical and atmospheric research	SRL	Scanning Raman Lidar
OLR	Outgoing Longwave Radiation	SSM/I	Special Sensor Microwave Imager
OMPS	Ozone Mapper and Profiler System	SST	sea surface temperature
OSIRIS	ODIN Spectrometer and IR Imager System	SSU	Spectral Sensor Unit
OSR	outgoing shortwave radiation	STAAC	“Systems, Technology, and Advanced Concepts Directorate”
OSSE	Observing System Simulation Experiment		

STROZ LITE	Stratospheric Ozone Lidar Trailer Experiment
SUCCESS	Subsonic aircraft: Contrails and Clouds Effects Special Study
SUNBEAMS	Students United with NASA Becoming Enthusiastic About Math and Science
TARFOX	Tropospheric Aerosol Radiative Forcing Observational eXperiment
TCO	tropospheric column ozone
THESO	Third European Stratospheric Experiment on Ozone
THOR	cloud THickness from Offbeam Returns
TIROS	Televised Infrared Operational Satellite
TM	Thematic Mapper
TMI	TRMM Microwave Imager
TOGA-COARE	Tropical Ocean Global Atmosphere-Coupled Ocean Atmosphere Response Experiment
TOMS	Total Ozone Mapping Spectrometer
TOMS-CAM	Total Ozone Mapping Spectrometer Camera
TOMS-EP	Total Ozone Mapping Spectrometer-Earth Probes
TOVS	TIROS Operational Vertical Sounder
TPW	total precipitable water
TRMM	Tropical Rainfall Measuring Mission
TSDIS	TRMM Science Data and Information System
UARS	Upper Atmosphere Research Satellite
UCLA	University of California - Los Angeles
USGCRP	US Global Change Research Program
USRA	Universities Space Research Association
UV	ultraviolet
VAL/912	Visualization and Analysis Laboratory
VIS	Visible
VOLCAM	Volcanic Ash Monitor
WCRP	World Climate Research Programme